

	<b>U.S. ENVIRONMENTAL PROTECTION AGENCY</b> Office of Pesticide Programs Registration Division (H7505C) 401 "M" St., S.W. Washington, D.C. 20460	<b>EPA Reg. Number:</b>  3125-421	<b>Date of Issuance:</b>  MAR 18 1994
		<b>Term of Issuance:</b> Conditional, Expires: September 30, 1998	
		<b>Name of Pesticide Product:</b>  Merit 75 WP	
<b>NOTICE OF PESTICIDE:</b> <u>  X  </u> Registration <u>      </u> Reregistration			
(under FIFRA, as amended)			
<b>Name and Address of Registrant (include ZIP Code):</b>  Miles Inc. P.O. Box 4913 8400 Hawthorn Road Kansas City, MO 64120-0013			
<b>Notes:</b> Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product, always refer to the above EPA registration number.			
<p>On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistration under the Federal Insecticide, Fungicide and Rodenticide Act.</p> <p>Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.</p> <p>This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(C) provided that you:</p> <ol style="list-style-type: none"><li>1. Submit data required to change this registration to an unconditional FIFRA section 3(c)(5) registration. The required data with deadlines for submitting the required data are listed on the second page of this notice of Pesticide Registration.</li><li>2. Make the following label changes:<ol style="list-style-type: none"><li>a) Add the phrase, "EPA Registration No. 3125-421" to your label before you release the product for shipment.</li><li>b) Add a statement to exclude use on grass grown for seed and research plots</li></ol></li></ol>			
<b>Signature of Approving Official:</b> DENNIS H. EDWARDS Dennis H. Edwards, Product Manager (19) Insecticide Branch Rodenticide Branch Registration Division (H7505C)		<b>Date:</b>  MAR 18 1994	

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3. Submit five (5) copies of your final printed labeling, with the changes referred to above, before you release the product for shipment.

Required Data and Deadlines for Submissions of Data:

**Toxicology**

1. You must submit acute and subchronic neurotoxicity testing. These studies must be received by the Agency by June 30, 1994.

**Environmental Fate**

2. The submitted validated analytical methods for the determination of Imidacloprid and degradates of toxicological concern in ground and surface water samples must be acceptable or Miles must make appropriate corrections/additions and resubmit the analytical method within 6 months after notification.

**Ecological Effect**

3. Submit a new mallard reproduction study to establish the NOEC for eggshell thickness. This study must be received by the Agency by November 30, 1994.

4. Conduct a baseline field monitoring study to locate suitable sites and avian species (a species that would have high exposure to NTN on turf during the nesting reproduction period of this species). This study must be received by the Agency by November 30, 1994.

5. Once the appropriate avian species has been identified, you must demonstrate that this species has reasonable sensitivity in order to be used as an indicator species, ie shows reproductive impairment at levels that can expected to be found in the environment. These studies must be received by the Agency by December 30, 1995.

6. You must submit an acceptable avian reproduction monitoring study with the appropriate species. The study should be at least 2 years in length (2 full nesting seasons). This study must be submitted by December 31, 1997.

7. An annual progress report of the monitoring study must be submitted by September 30, of each year during the period this product is conditionally registered.

If these conditions are not complied with, the registration will be subject to can cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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A stamped copy of the label is enclosed for your records.

Sincerely,

**DENNIS H. EDWARDS**

Dennis H. Edwards, Jr.  
Product Manager 19  
Insecticide-Rodenticide Branch  
Registration Division (H7505C)

Enclosure

# MERIT 75 WP Systemic Insecticide

UER-8124.YLD

U.S. LABEL

Base Pre-Reg. (8124)

**Reason to Issue:** To submit final label  
language to EPA based on their 01/27/94 letter.

Date of Draft: 02/22/94 (Pre-Reg)(C)  
Supersedes Pre-Reg Draft dated: 06/24/93  
11/09/93 and 12/15/93

ACCEPTED  
with COMMENTS  
in EPA Letter Dated

MAR 18 1994

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

3125-421

## MERIT 75 WP Systemic Insecticide

FOR INSECT CONTROL IN TURFGRASS, LANDSCAPE ORNAMENTALS  
AND INTERIOR PLANTSCAPES

**ACTIVE INGREDIENT:**

Imidacloprid, 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine .....	75.0%
INERT INGREDIENTS .....	25.0%
	100.0%

EPA File Symbol No. 3125-UER

Net Contents: \_\_\_\_ Pounds

**STOP - READ THE LABEL BEFORE USE**

**KEEP OUT OF REACH OF CHILDREN**

### CAUTION

(See Rear Panel for Statements of Practical Treatment and Other Precautionary Statements)

### AVISO

**PRECAUCION AL USUARIO:** Si usted no  
puede leer o entender inglés, no use este  
producto hasta que la etiqueta le haya sido  
explicada ampliamente.

**(TO THE USER:** If you cannot read or understand  
English, do not use this product until the label has  
been fully explained to you.)

**MILES** 

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

Harmful if swallowed, inhaled, or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing dust or vapor.

Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Keep children or pets off treated area until spray is dry.

### STATEMENTS OF PRACTICAL TREATMENT

**If swallowed:** Call a physician or Poison Control Center. Drink one or two glasses of water and induce vomiting by touching back of throat with finger, or, if available, by administering syrup of ipecac. If syrup of ipecac is available, administer 1 tablespoonful (15 ml) of syrup of ipecac followed by 1 to 2 glasses of water. If vomiting does not occur within 20 minutes, repeat the dose once.

Do not induce vomiting or give anything by mouth to an unconscious person. **If on skin:** Wash thoroughly with soap and water. Get medical attention if irritation occurs. **If in eyes:** Hold eyelids open and flush with plenty of water.

**TO PHYSICIAN:** No specific antidote is available. Treat the patient symptomatically.

### ENVIRONMENTAL HAZARDS

This product is highly toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**IMPORTANT:** Read these entire DIRECTIONS FOR USE, GENERAL INFORMATION, AND CONDITIONS OF SALE before using MERIT 75 WP Systemic Insecticide.

#### CONDITIONS OF SALE:

THE DIRECTIONS ON THIS LABEL WERE DETERMINED THROUGH RESEARCH TO BE APPROPRIATE FOR THE CORRECT USE OF THIS PRODUCT. THIS PRODUCT HAS BEEN TESTED UNDER DIFFERENT ENVIRONMENTAL CONDITIONS BOTH INDOORS AND OUTDOORS UNDER

CONDITIONS SIMILAR TO THOSE THAT ARE ORDINARY AND CUSTOMARY WHERE THE PRODUCT IS TO BE USED. INSUFFICIENT CONTROL OF PESTS OR PLANT INJURY MAY RESULT FROM THE OCCURRENCE OF EXTRAORDINARY OR UNUSUAL CONDITIONS, OR FROM FAILURE TO FOLLOW LABEL DIRECTIONS. IN ADDITION, FAILURE TO FOLLOW LABEL DIRECTIONS MAY CAUSE INJURY TO ANIMALS, MAN, AND DAMAGE TO THE ENVIRONMENT. MILES OFFERS, AND THE BUYER ACCEPTS AND USES, THIS PRODUCT SUBJECT TO THE CONDITIONS THAT EXTRAORDINARY OR UNUSUAL ENVIRONMENTAL CONDITIONS, OR FAILURE TO FOLLOW LABEL DIRECTIONS ARE BEYOND THE CONTROL OF MILES AND ARE, THEREFORE, THE RESPONSIBILITY OF THE BUYER.

## GENERAL INFORMATION

### APPLICATION TO TURFGRASS

MERIT 75 WP Systemic Insecticide can be used for the control of soil inhabiting pests of turfgrass, such as Northern & Southern masked chafers, *Cyclocephala borealis*, *C. immaculata*, and/or *C. lurida*; Asiatic garden beetle, *Maladera castanea*; European chafer, *Rhizotrogus majalis*; May or June beetle, *Phyllophaga* spp.; Japanese beetle, *Popillia japonica*; Oriental beetle, *Anomala orientalis*; Billbugs, *Sphenophorus* spp.; Annual bluegrass weevil, *Hyperodes* spp.; Black turfgrass ataenius, *Ataenius spretulus* and *Aphodius* spp. MERIT 75 WP Systemic Insecticide can be used as directed on all sites where turfgrass is grown, such as but not limited to, home lawns and commercial turf, golf courses, airports, cemeteries, parks, playgrounds, athletic fields, and any other area where lawns or turfgrass can be infected with destructive soil insects. Turfgrass in sites such as home lawns, business and office complexes, shopping complexes, multi-family residential complexes, golf courses, airports, cemeteries, parks, playgrounds, and athletic fields. MERIT Insecticide can not be used on commercial sod farms.

The active ingredient in MERIT 75 WP Systemic Insecticide has sufficient residual activity so that applications can be made preceding the egg laying activity of the target pests. High levels of control can be achieved when applications are made preceding or during the egg laying period. The need for an application can be based on historical monitoring of the site, previous records or experiences, current season adult trapping or other methods. Optimum control will be achieved when applications are made prior to egg hatch of the target pests, followed by sufficient irrigation or rainfall to move the active ingredient through the thatch.

Applications should not be made when turfgrass areas are waterlogged or the soil is saturated with water. Adequate distribution of the active ingredient cannot be achieved when these conditions exist. The treated turf area must be in such a condition that the rainfall or irrigation will penetrate vertically in the soil profile. Applications cannot exceed a total of 40.7 8.6 oz (0.5 0.4 lb of active ingredient) per acre per year.

### APPLICATION EQUIPMENT FOR USE ON TURFGRASS

Apply MERIT 75 WP Systemic Insecticide in sufficient water to provide adequate distribution in the treated area. The use of accurately calibrated equipment normally used for the application of turfgrass insecticides is required. Use equipment which will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off target drift. Check calibration periodically to ensure that equipment is working properly.

### APPLICATION TO ORNAMENTALS

MERIT 75 WP Systemic Insecticide is for use on ornamentals in commercial and residential landscapes and interior and exterior plantscapes, and other areas where ornamentals or non-food producing plants are grown. MERIT 75 WP Systemic Insecticide is a systemic product and will be translocated upward into the plant system. To assure optimum effectiveness, the product must be placed where the growing portion of the target plant can absorb the active ingredient. The addition of a nitrogen containing fertilizer, where applicable, into the solution will enhance the uptake of the active ingredient. Application can be made by foliar application or soil applications; including soil injection, drenches, and broadcast sprays.

When making soil applications to plants with woody stems, systemic activity will be delayed until the active ingredient is translocated throughout the plant. In some cases, this translocation delay can take up to 60 days. For this reason, applications should be made prior to anticipated pest infestation to achieve optimum levels of control.

For outdoor ornamentals, broadcast applications cannot exceed a total of 40.7 8.6 oz (0.5 0.4 lb of active ingredient) per acre per year.

**NOTE:** Not for use in commercial greenhouses, nurseries, or on sod farms.

### APPLICATION EQUIPMENT FOR ORNAMENTAL USES

MERIT 75 WP Systemic Insecticide mixes readily with water and may be used in many types of application equipment. Mix product with the required amount of water and apply as desired dependent upon the selected use pattern.

When making foliar applications on hard to wet foliage such as holly, pine, or ivy, the addition of a spreader/sticker is recommended. For optimum effectiveness, applications should be made when the foliage can absorb the active ingredient systemically. If concentrate or mist type spray equipment is used, an equivalent amount of product should be used on the area sprayed, as would be used in a dilute application.

MERIT 75 WP Systemic Insecticide has been found to be compatible with commonly used fungicides, miticides, liquid fertilizers, and other commonly used insecticides. Check physical compatibility using the correct proportion of products in a small jar test if local experience is unavailable.

Do not apply through any irrigation system.

# RECOMMENDED APPLICATIONS

CROP	PEST	DOSAGE MERIT 75 WP	REMARKS
Turf Grasses	Larvae of: Japanese beetle Black turfgrass ataenius Northern masked chafer Southern masked chafer European chafer Oriental beetle Asiatic garden beetle <i>Phyllophaga</i> spp. Billbugs Annual bluegrass weevil	5.4 to <del>10.7</del> <del>8.6</del> oz per acre  or  3.5 to <del>7.0</del> <del>5.6</del> grams per 1000 sq ft	For optimum control, make application prior to egg hatch of the target pest.  Be sure to read "APPLICATION EQUIPMENT" Section of this label.  <b>SEE NOTE SEE GENERAL INFORMATION SECTION OF THIS LABEL</b>
	Larvae of: Japanese beetle Black turfgrass ataenius Northern masked chafer Southern masked chafer European chafer Oriental beetle Asiatic garden beetle <i>Phyllophaga</i> spp.	<del>6.4</del> oz per acre  or  4.2 grams per 1000 sq ft	
	Larvae of: Billbugs Annual bluegrass weevil	<del>6.4</del> to <del>8.6</del> oz per acre  or  4.2 to 5.6 grams per 1000 sq ft	

Consult your local turf, state Agricultural Experiment Station, or State Extension Service Specialists for more specific information regarding timing of application.

**NOTE:** For optimum control, irrigation or rainfall should occur within 24 hours after application to move the active ingredient through the thatch. Do not apply more than ~~10.7~~ ~~8.6~~ oz (0.5 0.4 lb of active ingredient) per acre per year. Avoid mowing turf or lawn area until after irrigation or rainfall has occurred so that uniformity of application will not be affected.

**RECOMMENDED APPLICATIONS FOR USE ON or IN ORNAMENTALS**

**For use only in and around industrial and commercial buildings and residential areas (including trees, shrubs, evergreens, flowers, foliage plants, ground covers, and interior plantscapes).**

**TO CONTROL**

PEST	DOSAGE MERIT 75 WP	REMARKS
Adelgids Aphids Elm leaf beetle Lacebugs Leafhoppers Leafminers Mealybugs Sawfly larvae Thrips WhiteFlies	15 grams per 100 gal of water	<p align="center"><b>ALL ORNAMENTALS</b></p> <p><b>Foliar Applications:</b> Start treatments prior to establishment of high pest populations and reapply on an as needed basis. Refer to the <b>GENERAL INFORMATION</b> and <b>APPLICATION EQUIPMENT</b> sections for specific use directions for Foliar Applications.</p> <p align="center"><b>SEE GENERAL INFORMATION</b></p>
White grub larvae (such as Japanese beetle larvae, Chafers, <i>Phyllophaga</i> spp. Asiatic garden beetle, Oriental beetle)	3.5 to <del>7.0</del> <b>5.6</b> grams per 1000 sq ft	<p><b>Broadcast Applications:</b> Mix required amount of product in sufficient water to uniformly and accurately cover the area being treated. Do not use less than 2 gallons of water per 1000 sq ft. For optimum control, irrigate thoroughly to incorporate MERIT 75 WP Systemic Insecticide into the upper soil profile.</p> <p>Refer to REMARKS section for use directions specific for FLOWERS and GROUND COVERS concerning additional use directions.</p> <p align="center"><b>SEE GENERAL INFORMATION</b></p>



## RECOMMENDED APPLICATIONS (Continued)

## THE FOLLOWING USE PATTERNS WILL CONTROL THE PESTS LISTED BELOW

Adelgids, Aphids, Lacebugs, Leafminers, Mealybugs, Scale insects, Thrips, Whiteflies, Pine Tip moth larvae, Elm Leaf beetle, Sawfly larvae, Japanese beetle, Leafhoppers and White grub larvae.

DOSAGE MERIT 75 WP	REMARKS
<p>2.0 grams per inch of trunk diameter (D.B.H.)</p>	<p style="text-align: center;"><b>TREES</b></p> <p><b>Soil Injection:</b> GRID SYSTEM: Holes should be spaced on 2.5 foot centers, in a grid pattern, extending to the drip line of the tree. CIRCLE SYSTEM: Apply in holes evenly spaced in circles, (use more than one circle dependent upon the size of the tree) beneath the drip line of the tree extending in from that line.</p> <p>Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone. For optimum control, keep the treated area moist for 7 to 10 days. Do not use less than 4 holes per tree.</p> <p><b>Soil Drench:</b> Uniformly apply the dosage in no less than 10 gallons of water per 1000 square feet as a drench around the base of the tree, directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.</p> <p style="text-align: center;"><b>SEE GENERAL INFORMATION</b></p>
<p>1.0 to 2.0 grams per foot of shrub height</p>	<p style="text-align: center;"><b>SHRUBS</b></p> <p>For shrubs up to 4 feet tall, apply the lower rate; on shrubs 4 feet and taller, apply the higher rate.</p> <p><b>Soil Injection:</b> GRID SYSTEM: Holes should be spaced on 2.5 ft centers, in a grid pattern extending to the perimeter of the shrub planting. CIRCLE SYSTEM: Apply in holes evenly spaced in circles (use more than one circle dependent upon the size of the shrub) beneath the drip line of the shrub extending in from that line.</p> <p>Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone. Keep the treated area moist for 7 to 10 days. Do not use less than 4 holes per shrub.</p> <p><b>Soil Drench:</b> Uniformly apply the dosage in no less than 10 gallons of water per 1000 square feet as a drench around the base of the tree, directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.</p> <p style="text-align: center;"><b>SEE GENERAL INFORMATION</b></p>
<p>3.5 to <del>7.0</del> 5.6 grams per 1000 sq ft</p>	<p style="text-align: center;"><b>FLOWERS &amp; GROUND COVERS</b></p> <p>Apply as a broadcast treatment and incorporate into the soil before planting or apply after plants are established. If application is made to established plants, optimum control will be attained if area is irrigated thoroughly after application.</p> <p style="text-align: center;"><b>SEE GENERAL INFORMATION</b></p>

## RESTRICTIONS

Do not graze treated areas or use clippings from treated areas for feed or forage. Avoid runoff or puddling of irrigation water following application. Keep children and pets off treated area until dry. Avoid application of MERIT 75 WP Systemic Insecticide to areas which are water

logged or saturated, which will not allow penetration into the root zone of the plant. Do not apply more than 40.7 ~~5.6~~ oz (0.5 ~~0.6~~ lb of active ingredient) per acre per year. Do not plant any food crop within one year of a treatment with MERIT 75 WP Systemic Insecticide.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides above. In spill or leak incidents, keep unauthorized people away. You may contact the Miles Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Miles Kansas City Emergency Response telephone number is 816-242-2582, or contact Chemtrec at 800-424-9300.

Miles, Inc.  
Specialty Products  
Box 4913 Kansas City, MO 64120-0013